

CLAIM AMENDMENTS:

Please amend the claims as follows:

1. (Currently amended) A composition for culturing ~~a population of~~ epidermal melanocytes comprising basal medium, serum, one or more ~~antibiotic~~ antibiotics, one or more growth factor ~~factors~~, and one or more natural, physiological cAMP-elevating ~~agent~~ agents, wherein ~~the epidermal melanocytes exhibit proliferative growth, melanin production and migratory behavior~~ the one or more natural, physiological cAMP-elevating agents comprises epinephrine, and wherein the one or more growth factors comprises hepatocyte growth factor.
2. (Currently amended) The composition of claim 1, wherein the serum is selected from the group consisting of bovine serum, ~~new-born~~ newborn bovine serum and fetal bovine serum.
3. (Original) The composition of claim 2, wherein the serum is fetal bovine serum.
4. (Original) The composition of claim 1, wherein the basal medium is selected from the group consisting of Ham's F12, RPMI and DMEM.
5. (Original) The composition of claim 4, wherein the basal medium is Ham's F12.
6. (Currently amended) The composition of claim 1, wherein the ~~growth factor is~~ one or more growth factors further comprises a growth factor selected from the group consisting of basic fibroblast growth factor, ~~hepatocyte growth factor~~, epidermal growth factor, and transforming growth factor- β , and a combination thereof.

7. (Currently amended) The composition of claim 6, wherein the ~~growth factor~~ one or more growth factors is a combination of hepatocyte growth factor and basic fibroblast growth factor.

8. (Currently amended) The composition of claim 1, wherein the one or more natural, physiological cAMP-elevating ~~agents~~ agent ~~is selected from the group consisting of further~~ comprises α -melanocyte stimulating factor, ~~adrenaline, and L-epinephrine.~~

9. (Currently amended) The composition of claim 8, wherein the one or more natural, physiological cAMP-elevating ~~agent~~ agents is a combination of epinephrine and α -melanocyte stimulating factor.

10. (Canceled).

11. (Currently amended) A method of obtaining ~~a proliferating population of~~ epidermal melanocytes comprising:

isolating epidermal melanocytes from a donor; and
culturing the epidermal melanocytes using the composition of claim 1,
wherein the cultured epidermal melanocytes exhibit proliferative growth, melanin production and migratory behavior.

12. (Original) The method of claim 11, wherein the epidermal melanocytes are isolated from a skin sample.

13. (Currently amended) The method of claim 12, wherein the skin sample is obtained ~~the group consisting of~~ from a minigraft or a blister top.

14. (Original) The method of claim 13, wherein the skin sample is obtained from a blister top.

15. (Original) The method of claim 14, wherein the blister top is removed from a suction blister obtained by applying a vacuum to the surface of the skin.

16. (Original) The method of claim 12, wherein the skin sample is treated mechanically and/or enzymatically to dissociate epidermal melanocytes from other cells and tissues in the skin sample.

17. (Original) The method of claim 16, further comprising incubating the skin sample in geneticin wherein the incubation inhibits the growth of keratinocytes and fibroblasts.

18. (Currently amended) A method of providing a subject in need of skin pigmentation with a proliferating population of epidermal melanocytes comprising
isolating epidermal melanocytes from said subject;
culturing the epidermal melanocytes using the composition of claim 1 ~~to obtain a~~
~~proliferating population of epidermal melanocytes~~; and
applying the ~~proliferating population of~~ cultured epidermal melanocytes to the skin of said subject,

wherein the cultured epidermal melanocytes exhibit proliferative growth, melanin production and migratory behavior.

19. (Currently amended) ~~A composition comprising a population of epidermal~~
Epidermal melanocytes cultured in a ~~medium comprising~~composition comprising
basal medium, serum, one or more antibiotic, one or more growth factor, and one or more
natural, physiological cAMP-elevating agent,

wherein the one or more natural, physiological cAMP-elevating agent comprises
epinephrine,

wherein the one or more growth factors comprises hepatocyte growth factor, and

wherein the cultured epidermal melanocytes exhibit proliferative growth, melanin
production and migratory behavior.